

**Short Lived Climate Pollutant Black Carbon Emission Inventory**  
*Units of Million Metric Tons CO<sub>2</sub>e (AR5 100-yr GWP)*

Source	2000	2013	2020	2030
<b>Off-Road Mobile</b>	<b>6.2</b>	<b>3.9</b>	<b>2.7</b>	<b>1.8</b>
Aircraft	0.47	0.49	0.54	0.57
Off-Road Equipment	2.87	1.42	0.80	0.39
Farm Equipment	1.54	0.99	0.72	0.35
Commercial Harbor Craft	0.66	0.42	0.22	0.17
Trains	0.33	0.23	0.20	0.15
Other	0.33	0.31	0.21	0.19
<b>On-Road Diesel</b>	<b>4.8</b>	<b>1.9</b>	<b>0.1</b>	<b>0.0</b>
Light Duty	0.06	0.01	0.01	0.00
Heavy and Medium Duty	4.57	1.83	0.14	0.04
Other	0.17	0.05	0.00	0.00
<b>On-Road Gasoline</b>	<b>0.8</b>	<b>0.2</b>	<b>0.2</b>	<b>0.1</b>
Light Duty	0.68	0.14	0.13	0.11
Heavy and Medium Duty	0.08	0.03	0.02	0.02
Other	0.00	0.00	0.00	0.00
<b>Residential Wood Combustion</b>	<b>2.0</b>	<b>1.6</b>	<b>1.7</b>	<b>1.8</b>
Fireplaces	1.00	0.70	0.72	0.75
Woodstoves	0.98	0.94	0.99	1.07
<b>Stationary Fuel Combustion</b>	<b>1.5</b>	<b>1.2</b>	<b>1.1</b>	<b>1.1</b>
Cogeneration and Electricity	0.58	0.50	0.36	0.43
Manufacturing and Industrial	0.41	0.23	0.23	0.23
Service and Commercial	0.21	0.20	0.19	0.21
Other	0.33	0.29	0.27	0.26
<b>Commercial Cooking</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.5</b>
Commercial Charbroiling	0.27	0.30	0.33	0.38
Cooking (Unspecified)	0.07	0.09	0.10	0.11
Deep Fat Frying	0.01	0.01	0.01	0.01
<b>Industrial Processes</b>	<b>0.5</b>	<b>0.3</b>	<b>0.3</b>	<b>0.4</b>
Mineral Processes	0.24	0.15	0.18	0.21
Wood and Paper	0.15	0.08	0.08	0.09
Other	0.16	0.06	0.07	0.08
<b>Miscellaneous Processes</b>	<b>0.5</b>	<b>0.5</b>	<b>0.6</b>	<b>0.6</b>
<b>On-Road Brake and Tire</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>
<b>Agricultural Burning</b>	<b>1.1</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>
<b>Waste Disposal</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>
<b>Petroleum Production and Marketing</b>	<b>0.0</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>
<b>Total Emissions (MMTCO<sub>2</sub>e)</b>	<b>18.2</b>	<b>10.7</b>	<b>7.8</b>	<b>7.2</b>

Data and documentation available at: [www.arb.ca.gov/cc/inventory/slcp/slcp.htm](http://www.arb.ca.gov/cc/inventory/slcp/slcp.htm)